

ABSTRACT OF THE DISCLOSURE

The present invention relates to virulent (lytic) Listeria monocytogenes phage from the Myoviridae family, preferably P100, alone or in combination with other virulent phages. P100 and the endolysin from P100 can be administered to food products, to the components that will be added to food products, and/or to the infrastructure of the food processing plants within which such food products are processed, or the containers or wraps in which such foods are stored and/or shipped, in order to reduce Listeria monocytogenes contamination. P100 can also be used in the present invention to identify Listeria monocytogenes bacteria present on (or within) foodstuffs, as well as those Listeria monocytogenes bacteria present in the equipment or the general environment of the food processing plants in which the foodstuffs are being processed and in animals infected with Listeria monocytogenes.

The phage and the endolysin of the present invention can also be used to treat animals infected with Listeria monocytogenes. P100 will kill the bacteria that are within its host range with great efficiency and will propagate to high titer thereon. P100 can be combined with other lytic phage, and/or with other antimicrobial agents to reduce or eliminate Listeria.